



<b>Department:</b>	Laboratory and Blood Bank		
<b>Document:</b>	Internal Policy and Procedure		
<b>Title:</b>	CS- 2100i Coagulation Analyzer		
<b>Applies To:</b>	All Haematology Staff		
<b>Preparation Date:</b>	January 07, 2025	<b>Index No:</b>	LB-IPP-075
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## 1. PURPOSE:

- 1.1 The sysmex coagulation analyzer provides an automated determination of PT, PTT.

## 2. DEFINITONS:

N/A

## 3. POLICY:

- 3.1 The accurate procedure for Startup operation on SYSMEX CS- 2100i COAGULATION ANALYZER properly.

## 4. PROCEDURE:

### 4.1 Operation Procedure:

- 4.1.1 Turn on the power on the left side of the instrument. (The system automatically performs a roughly 10 second self-check, and the root menu screen will appear.)
- 4.1.2 When the detector and cooler reach an analysis –permitting temp. The root menu screen displays (ready)

### 4.2 Manual Entry:

- 4.2.1 Press Menu
- 4.2.2 Press Settings
- 4.2.3 Press Reagent Lot Master
- 4.2.4 Place cursor in Lot No. field
- 4.2.5 Enter lot number in Lot No. field
- 4.2.6 Place cursor in Exp. Date field
- 4.2.7 Enter Exp. Date using calendar
- 4.2.8 Press Add
- 4.2.9 Press Save

### 4.3 Barcode Entry:

- 4.3.1 Press Menu from IPU toolbar
- 4.3.2. Press Settings
- 4.3.3 Press Reagent Lot Master
- 4.3.4 Select Import
- 4.3.5 Select Barcode
- 4.3.6 Scan assay value sheet 2D barcode with barcode reader
- 4.3.7 Press Save
- 4.3.8 Press Exit
- 4.3.9 Press Close
- 4.3.10 Note: 2D Barcodes are found on the Table of Analytical Values insert sheet for Siemens reagents, calibrators, and all assayed controls.



#### 4.4 **Loading Reagents:**

- 4.4.1 Press Reagent
- 4.4.2 Highlight a position on the reagent table
- 4.4.3 Press Change/Add
- 4.4.4 Verify reagent table cover LED is green
- 4.4.5 Open reagent table cover
- 4.4.6 Place reagents in the rack with barcode facing out
- 4.4.7 Load the reagent rack
- 4.4.8 Lock reagent table cover
- 4.4.9 Press OK
- 4.4.10 Diluent Table Loading
- 4.4.11 Press Reagent
- 4.4.12 Verify diluent table cover LED is green
- 4.4.13 Open diluent table cover
- 4.4.14 Place reagent in an adaptor (if necessary) with barcode facing out
- 4.4.15 Place into the diluent table
- 4.4.16 Close diluent table cover
- 4.4.17 Press OK

#### 4.5 **C-Rack and SLD Mini Cup:**

- 4.5.1 Reconstitute requested control or calibrator observing package insert instructions.
- 4.5.2 Aspirate entire content of GW5 vial using appropriate pipette.
- 4.5.3 Slowly dispense the entire volume into a new SLD pipette tip mini cup, avoiding air bubble formation
- 4.5.4 After reagent transfer, carefully check for bubbles and, if required, remove using smaller SLD.
- 4.5.5 Set SLD mini cup into corresponding GW5 vial. Set GW5 with SLD into yellow-handled C-rack. Push down on vial to ensure proper seating in position.
- 4.5.6 Note: C-Rack is used for controls and calibrators.

#### 4.6 **Processing QC from Reagent Table:**

- 4.6.1 Load reagents
- 4.6.2 Press Order
- 4.6.3 Press Switch Order
- 4.6.4 Press Holder QC Order
- 4.6.5 Press Order Entry
- 4.6.6 Place cursor in the control field and select the appropriate control
- 4.6.7 Place cursor in the Lot No. field and select appropriate lot number
- 4.6.8 Select the appropriate assay(s) for the control material being processed
- 4.6.9 Press Start when all control material is ordered
- 4.6.10 Press the down arrow to order the next control

#### 4.7 **Start analysis:**

- 4.7.1 Manual Order Processing
- 4.7.2 Manual Order Processing Using Rack Barcode
- 4.7.3 Place rack with sample tubes on sampler
- 4.7.4 Press Order
- 4.7.5 Select tube position to input an order
- 4.7.6 Press Order Entry
- 4.7.7 Press Ordinary Sample
- 4.7.8 Place cursor in Sample No. and input sample ID if the sample does not contain a barcode
- 4.7.9 Select assays to be processed
- 4.7.10 Press the down arrow to order another sample
- 4.7.11 Press Start
- 4.7.12 Confirm sample order status on the Job list
- 4.7.13 Result it will come automatically

**4.8 Daily Maintenance:**

- 4.8.1 Shut down and Startup the system and PC
- 4.8.2 Check Status
- 4.8.3 Check printer paper
- 4.8.4 Check/Replace DI water
- 4.8.5 Check/Empty waste container
- 4.8.6 Check/Discard trap chamber fluid
- 4.8.7 Check/Add reaction tubes. DO NOT fill above the red line
- 4.8.8 Empty/Clean reaction tube trash. Reset software counter
- 4.8.9 Check/Remove condensation from reagent table and cover
- 4.8.10 Check/Prepare reagents
- 4.8.11 Execute probe rinse
- 4.8.12 Document completed tasks

**4.9 Weekly Maintenance Tasks:**

- 4.9.1 Clean instrument interior / exterior using a pH neutral detergent
- 4.9.2 Check/Discard water from tray No. 48
- 4.9.3 Clean DI water rinse bottle with 70% alcohol (if applicable)
- 4.9.4 Replace trash box liner

**4.10 Monthly Maintenance:**

- 4.8.1 Remove dust from air filters using a vacuum or similar device
- 4.8.2 Lamp calibration

**5. MATERIALS AND EQUIPMENT:**

**5.1 Prepare reagents:**

- 5.1.1 PT reagents
- 5.1.2 APTT reagent
- 5.1.3 Calcium chloride reagent.
- 5.1.4 Sample cups
- 5.1.5 Ovi buffer
- 5.1.6 Normal/ abnormal control. and Citrol 2 control

**6. RESPONSIBILITIES:**

- 6.1 All hematology staff starts up procedure SYSMEX CS- 2100i COAGULATION ANALYZER properly.

**7. APPENDICES:**

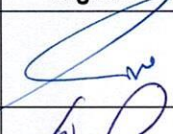
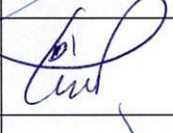




N/A

**8. REFERENCES:**

- 8.1 SYSMEX CS- 2100i COAGULATION ANALYZER, Instructions for by SYSMEX CORPORATION



## 9. APPROVALS:

	Name	Title	Signature	Date
Prepared by:	Dr. Fatma Hassan Ahmed	Clinical Pathologist		January 07, 2025
Reviewed by:	Dr. Kawther M. Abdou	Consultant & Lab. Medical Director		January 08, 2025
Reviewed by:	Ms. Noora Melfi Alanizi	Laboratory & Blood Bank Director		January 09, 2025
Reviewed by:	Mr. Abdulelah Ayed Al Mutairi	QM&PS Director		January 12, 2025
Reviewed by:	Dr. Tamer Mohamed Naguib	Medical Director		January 12, 2025
Approved by:	Mr. Fahad Hazam Alshammari	Hospital Director		January 21, 2025